

IN THE SPECIFICATION:

Please amend paragraph [0030] as follows:

[0030] The output of RF filters 32 are input to a wide band (e.g. 0.1Hz to 20kHz), low gain differential amplifier ~~64~~34. In the first embodiment, the output of amplifier ~~64~~34 is an amplified version of the signal generated by pickup coil 18 which represents the respiration of subject 10. In the second embodiment, the output of amplifier ~~64~~34 is an amplified version of ECG signals from leads 28 and 32 combined with a signal representing the respiration of subject 10. Optionally, the output of amplifier 34 could be supplied to a second amplifier, e.g., a wide band single ended amplifier, inserted prior to slew rate filter 36 if the gain of amplifier 34 proves to be less than optimal. The amplified signal, either the output of amplifier 34 or the optional wide band amplifier not shown, is applied to a gradient filter, e.g., slew rate filter 36, which suppresses voltage spikes from gradient pulses picked up by electrode leads 28 and 30. Preferably, a fast recovery slew rate filter is used which does not saturate with large induced spikes. It is preferable to set slew rate filter 36 to attenuate spikes with a slew rate greater than approximately 50 mv/msec. As one of ordinary skill will readily recognize, other types of gradient filters may be substituted for slew rate filter 32. The signal is then input to fiber optic transmitter 38 for conversion from an electrical signal to an optical signal.